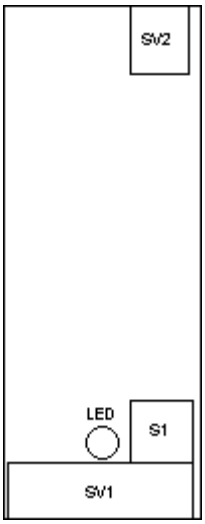
Receiver 433RX2



This unit is designed to be used with the 433TX transmitter for the remote control of a camera rig for kite aerial photography (KAP). The unit consists of a decoder module (left picture) and a separate receiver module (not shown) to be placed outside the frame of the camera rig.

LED: Indicator for parameter setting
S1: Pushbutton for parameter setting
SV1: Connectors for servo and shutter signals
SV2: Connector for receiver module

Technical information

Frequency:	433.92 megacycles ASK (amplitude shift keying)
Range:	about 30 – 60 metres (depends on transmitter and environment)
Power supply:	4.5 to 6 volts DC
Current:	(Power supply 5 volts) 10mA (without control) 20mA (shutter control) 50-100mA (horizontal control *1) 50-100mA (vertical control *1) (*1: depends on rig and servos)
Dimensions of items:	Receiver module 23 x 50 x 15 (millimetres), 1 x 2 x 0.6 (inches) Decoder module 25 x 65 x 15 (millimetres), 1 x 2.6 x 0.6 (inches) Wires between modules: about 200 millimetres, 8 inch
Weight:	22 gram, about 0.8 oz

Radio Frequency Transmission:
This system operates at 433 megahertz, in the Industrial Scientific Medical (ISM) band. Use of the 433 megahertz frequency band for this purpose is permitted in Europe and the USA; you will have to determine if it is legal in your country. The receiver module should be placed outside the metal frame of the camera rig to avoid problems with radio frequency reception.

LED information
If parameter setting is switched on, the LED shows with number of pulses the selected parameter function. See Parameter Setting below for more details.

Horizontal control
The horizontal control requires that the horizontal (pan) servo be modified for 360-degree continuous rotation. Connect the servo to SV1 as shown in System Connections below. Turning speeds may be changed by parameter setting, below.

Vertical control
For the vertical control a normal servo is necessary. Connect the servo to SV1 as shown in System Connections below. The limit for turning upward and downward can be changed by parameter setting.

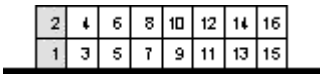
Shutter control
Shutter release is controlled by a relay, and requires a camera with an electrical or infra-red shutter switch. Connect the wires to SV1 as shown in System Connections below. The switch is closed as long as the button on the transmitter is pressed.

Parameter setting
To set parameters of the controls, press and hold the button S1 on the receiver during power up; release the button when the LED comes on. The LED shows with the number of flashes which parameter is selected:

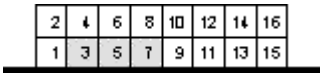
1 Speed turning right
2 Speed turning left
3 Limit when tilting up
4 Limit when tilting down

Select the parameter you wish to set by pressing the center (shutter) button on the 433TX transmitter repeatedly until the number of flashes matches the parameter you wish to change. Increase the parameter you are setting by pressing and holding the right button on the transmitter; decrease by pressing the left button. Press and hold until the servo is in the position desired; it works slowly, so have patience. To store parameter settings, press button S1; to stop parameter setting without storing the new settings, switch off the receiver power supply. After parameters are stored correctly, the buttons on the transmitter correspond with the receiver functions once again.

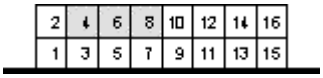
System Connections to SV1



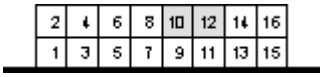
Power supply 4.5 to 6 volts
1: Plus
2: Minus



Servo module horizontal control
3: Minus
5: Plus
7: Signal



Servo module vertical control
4: Minus
6: Plus
8: Signal



Switch contact for shutter release
10: Contact relay1a
12: Contact relay 1b

Connector receiver module (SV2)

Receiver module
1: Minus
2: Plus
3: Signal

Contact
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Cautions:
No warranty for using the product.
No responsibility for problems, failure and malfunction by using the product.
Product and specification may be subject to change without notice.